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AUTHOR Kibrik, Alexandr E.

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ABSTRACT

An analysis of semantically ergative languages begins with a description of the essential results of research on ergativity to date, and an outline of the assumptions and conceptual apparatus on which the analysis is based. Subsequently, data from 20 Daghestanian languages, primarily Archi, are examined for evidence of the syntactic features of role-oriented ergative languages, including semantic roles and cases, voices, semantic role derivation, semantic derivation of predicates, nominalization, reflexivization, relativization, complementation, and coordination. It is concluded from this investigation that a pattern of syntactic organization in which all syntactic processes apply, regardless of the roles of the noun phrases, is possible, and that such a pattern allows the language to consistently follow the principle of role determination of case marking. There are many instances of apparent deviation from syntactic neutrality, but closer analysis usually shows that there is semantic motivation of the surface linguistic form. A 25-item bibliography is included. (MSE)

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SEMANTICALLY ERGATIVE LANGUAGES IN TYPOLOGICAL PERSPECTIVE

Alexandr E. Kibrik

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1 Introduction

It would be no exaggeration to say that in recent years interest in ergativity has grown almost exponentially. This "ergative boom" is no accident; it is the natural consequence of the fact that the focus of theoretical investigations has shifted to problems of the typology of content. And since ergativity has to do with how sentences are constructed, it is directly related to language type. What is important for linguistics is not the ergative pattern in itself but the fact that it is opposed to the accusative pattern and hence allows us to see the latter as a particular pattern of sentence construction rather than as a language universal. Ergativity requires the creation of a general theory of sentence constructions in which the accusative and ergative patterns appear as elements in the space of logical possibilities, assigned by the universal linguistic mechanism. And so the search for the essence of ergativity is ultimately a search for the essence of a universal model for constructing a basic sentence and for a typology of its particular realizations. Therefore, if linguists encountering ergative phenomena for the first time were to examine it exclusively from the point of view of its morphological distinctiveness (as did Uslar, Schuchardt, and Dirr), then generally their surprise at the unusual case techniques for coding subject and object would be superseded by attempts first to explain the existence of those techniques, and second to delimit "real" ergativity from

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"accidental" or superficial ergativity. Each of these two tasks can be accomplished in different ways, depending on one's initial assumptions. Rather than attempt a general overview of individual contributions to the literature on ergativity, I will simply survey what in my view are the essential results achieved so far.

1. It turns out that there is great diversity in the languages which can be described as ergative. Any limitation of the term ergativity leads to a substantial reduction in the number of languages admitted as properly ergatives. Languages which some researchers would consider to be ergative are excluded by others, and vice versa.

2. The only viable specifications of the term "ergative" prove to be those which define it as having to do with how content is coded in form, rather than those relying wholly on the formal organization of surface syntactic structure (the latter approach is taken by Mel'čhuk 1988). At the same time this path inevitably leads to one of the most fundamental questions of linguistics: What is the initial form of thought, or, in other words, What are the basic components of meaning and how do they receive their form?

3. The opposition of ergativity to accusativity is not a binary opposition; these concepts are simply two members of a multiple opposition.

4. Ergativity is not a homogeneous phenomenon. In individual languages ergativity co-occurs with other grammatical phenomena, and this requires the linguist to distinguish between: 1) inherent consequences of ergativity (phenomena indivisibly linked with ergativity); 2) phenomena often found together with ergativity, facilitated but not required by it (so that they are also found in non-ergative languages). An example of the first type is the absence of voice oppositions of the Indo-European type in ergative languages. An example of the second type is tense-based ergative/accusative splits where the ergative pattern appears in the past perfect tenses while the accusative appears in the present and future, as in Georgian and Svan. In these languages the ergative pattern is implied by the tense semantics rather than vice versa (Harris 1981). The difference between these two types of co-occurrent grammatical phenomena is not always obvious, and it is especially easy to mistake the second type for the first.

5. Languages are almost never homogeneous as regards their sentence structure - if they were, no changes in syntactic type would be possible - so it is important to

know how to identify the different tendencies in a language. This means that the notion "ergative language" is of dubious validity, and some scholars prefer to talk only about the "ergative construction" as a feature of particular languages (Klimov 1972).

This theoretical background is assumed in this paper without further discussion or commentary. In what follows I explicate briefly some of my own assumptions and my own conceptual apparatus for describing the syntactic structure of individual languages.

2 Conceptual apparatus

1. There is a widespread tendency to describe the opposition of accusativity to ergativity in terms of subject and object, assuming universality and uniform cross-linguistic realization for these syntactic notions. This is a consequence of a Eurocentric understanding of the essence of language. It is important that the syntactic type of sentence construction and the syntactic relations present in the sentence be defined independently of each other. And in any event the notions "subject" and "object", once they are studied more carefully, prove to be no less complicated than "ergativity" and "accusativity", and even less obviously universal (Van Valin 1981). Therefore it is necessary to work with primary notions that are not so language-specific. Ergativity is usually defined in terms of subject and object: the object of the transitive verb is described as formally identical to the intransitive subject, while the subject of a transitive verb receives special treatment. This kind of definition is used even by so functionally and typologically oriented a scholar as Givón (1984:151). This approach is useful only for an introductory orientation: it describes the facts of an ergative language in terms of more familiar accusative structures.

2. I assume that the basic syntactic structures of natural languages are determined not by formal restrictions which are imposed a priori on the language, but by the functions borne by these structures. In other words, the semantic level is the input to the basic structure.

3. The most important component of basic syntactic structure is the number and case features of NPs. Since (as just claimed) semantics is the input to syntax, what are the principal semantic functions of case marking? The following would appear to me to be the most fundamental semantic functions (note that they correlate to some extent with the traditional division into semantics and pragmatics):

a) **The semantic roles** of propositional arguments (the "deep cases" of Fillmore 1968). The most important semantic roles consistently identified by researchers are Agent, Patient, Experiencer, Recipient, Source, and a few others. These semantic primitives provide a universal means for generalizing over individual characteristics of participants in individual events.

b) **The communicative status** of NPs (what Chafe 1976 calls "information packaging strategies"). Among semantic oppositions subsumed under this function are such well-known notions as topic/comment, new/old information, specified/non-specified NP, etc. These meanings are related not to propositional and situational semantics but to the communicative goals of the speaker - to pack the information most expediently for the hearer's comprehension.

c) **Speech-act reference**. In actual communication, the most easily recoverable pragmatics for speaker and hearer is the speech act itself - in whose deictic system of coordinates (I - HERE - NOW) the information content of the message is mapped. This system of coordinates is what Wierzbicka 1980 proposes as the illocutive frame for the semantic representation of any declarative utterance X:

I say to you that X

with deictic elements *I* and *you*. Consequently the following basic semantic oppositions are natural because they are determined by the speech act:

speaker/non-speaker
speech-act participants/others

Note that in many American Indian languages, case-marking systems are based to a large extent on these oppositions: see e.g. Seki 1990.

4. In regard to the functions of case marking (in the broad sense, including morphological case, adpositions, clitics, word order, agreement, etc.), it is possible to separate three "pure" types of language:

(Semantic) role-oriented languages
(Information) packaging-oriented languages
Speech-act-oriented languages

A "pure" language is one whose case marking is predominantly determined by only one of these functions. That function is dominant for the language. The languages that have no single dominant function are "mixed".

5. For "mixed" languages (which are statistically predominant) it is extremely important to know which of the following two basic principles for coding this polyfunctional information they use:

agglutination, whereby each function has its own coding devices
fusion, whereby one coding device expresses all the functions

In other words, it turns out that the opposition of agglutinative to fusional techniques is meaningful not only for morphology but also no less for syntax.

Pure languages are syntactically agglutinative, but mixed languages can be either agglutinative or fusional. Unfortunately, most well-known European languages (the principal area of linguistic theory) belong to the mixed fusional type, and this fact makes it very difficult to sort out the meanings coded by the syntactic devices. The evidence of pure languages is most valuable for general typology, because the transparently organized structure of these languages, if examined without bias, gives a key for understanding the real types of functional oppositions.

In this discussion I will argue the following points. First, in addition to mixed languages there actually exist pure languages, one example of which are the role-oriented languages. Second, semantically ergative languages are relatively common in this group. Third, the syntactic organization of these languages serves as definitive proof of the existence of the role functions posited above. Fourth, it is possible to calculate all types of pure role-oriented languages.

6. In regard to role functions, the propositional structure of an utterance is determined by the number of arguments (NPs) and by their semantic roles, i.e. by the case frame. The following case frames are the most important (listed in order of increasing transitivity, as that term is defined by Hopper and Thompson 1980):

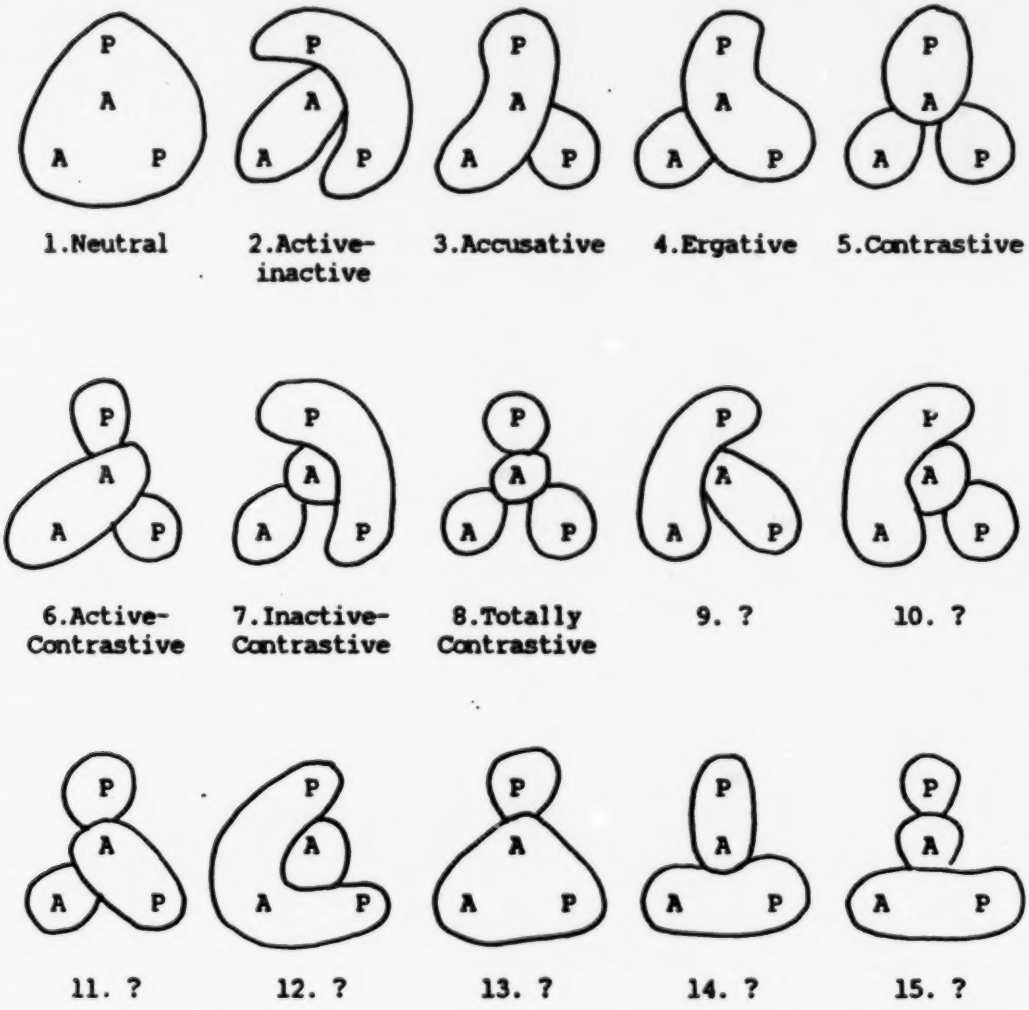
<Verb + Patient>: e.g., 'be good', 'be dead' (as opposed to 'die'), etc.

<Verb + Agent>: 'run', 'sit down', (as opposed to 'sit'), 'stand up' (as opposed to 'stay'), 'work', etc.

<Verb + Agent + Patient>: 'beat', 'kill', 'eat', etc.

7. The case marking of NPs in these case frames can map different systems of oppositions. The maximal number of logically possible oppositions is 15. They are shown in Figure 1 (arguments circled together have the same coding devices).

Figure 1 Calculus of argument coding types



8. However, even a glance at this calculus makes clear that the various coding types do not all have the same probability of occurrence. This is a purely intuitive judgment, but one for which linguistic grounds can be found. The reason has to do with semiotic and pragmatic principles for coding strategies that are natural for languages:

a) **Semantic motivation:** formal differences are signs of semantic differences (semantic roles, in our case).

b) **Maximal distinctiveness:** ambiguous structures are disfavored (in our case, the two-place verb leads to ambiguity, making it necessary to differentiate the roles of the NPs).

c) **Economy of expression:** use the minimal set of coding devices required to distinguish the semantic entities.

These principles are mutually independent in the logical sense, so they can conflict with each other, and every language resolves such conflicts in its own way. A real linguistic system is the result of a compromise between these principles.

9. What do these principles imply for our calculus? The neutral type (1) is in contradiction with principles (a)-(b) and is totally determined by the principle of economy (c). This type is very rare in the languages of the world; an example is Lisu (Li and Thompson 1976:47). In some Indo-European languages with case and gender there are neutral nominal subsystems which do not distinguish nominative and accusative cases, Russian *okno* 'window' (nom=acc), *mat'* 'mother' (nom=acc), *doč'* 'daughter' (nom=acc), etc. These words in some syntactic contexts can occasionally create ambiguous sentences, e.g.

Mat' ljubit doč'
Mother-NOM?ACC? loves daughter-NOM?ACC?
'Mother loves daughter' or 'Daughter loves mother'

The active-inactive type (2) is semantically motivated: it consistently distinguishes Agent and Patient. (To be more accurate, what it distinguishes are the hyperroles Actor and Undergoer in the sense of role and reference grammar. See Van Valin, in press). However, it is not economical in that it differentiates the actants of one-place verbs. This is syntactically and paradigmatically redundant, because the role of an actant is usually determined by the meaning of the verb.

The accusative (3) and ergative (4) types are economical and unambiguous. These types are also the most widespread variants of sentence organization in natural languages. The question of their relation to the principle of motivatedness will be discussed later.

The contrastive type (5) satisfies principles (a) (if we suppose that Agents and Patients of one-place verbs are not equivalent to Agents and Patients of two-place verbs) and (b), but it is not economical because it produces a three-way opposition. This type is also very rare, but it is a common intermediate stage in the transition from one syntactic organization to another. For example,in Udi (a Daghestanian, primarily ergative, language, but developing toward the accusative pattern) the NP of a one-place verb is nominative, while the Agent and Patient of a two-place verb are respectively ergative and dative. Types (6)-(8) represent more differentiated variations of contrastiveness. Languages of these types are not known to exist, but separate local subsystems in particular languages can be found. The absence of such languages is evidently due to the principle of economy.

And finally, almost half of the logically possible types – types 9-15 – are not realized in natural languages. Their absence is naturally explained by their inconsistency with the basic semiotic-pragmatic coding principles. Particularly, their absence is an indirect proof that the Agent/Patient opposition is of critical importance to natural languages.

10. Let us return, however, to the accusative and ergative types (3)-(4). Do they satisfy the principle of semantic motivation? The identical coding of the actant of a one-place verb and one of the actants (either the Agent or the Patient) of a two-place verb would seem to be motivated not only by the principle of formal economy, but also because it offers the possibility of reinterpreting the semantic roles. It is possible to distinguish two hyperroles, whose basic meanings are as follows:

Protagonist: the main participant, the 'hero' of the situation, who is primarily responsible for the fact that this situation takes place.

Factitive: the immediate, nearest, most involved or affected participant of the situation.

Both of these hyperroles (like the previously mentioned Actor and Undergoer) belong to the set of semantic universals. However, different languages make different

choices from this set. A language which chooses the hyperrole of Protagonist as its basic role entity belongs to the accusative type, while one which chooses Factitive represents the ergative pattern.

11. This typology of sentence organization is most directly relevant to the pure role-oriented languages. Such languages can respectively be termed **semantically** accusative, ergative, active-inactive, neutral, or contrastive.

It is also possible for one and the same technique of case marking to combine more than one function - for example, semantic role and communicative status. Such mixed fusional languages can be called **syntactically** accusative or ergative. The statistical distribution of accusativity and ergativity between semantics and syntax is extremely unequal:

	accusativity	ergativity
semantic	rare	frequent
syntactic	frequent	rare

Syntactically accusative and semantically ergative languages are the most frequent types. A possible example of a semantically accusative language is Tagalog, which has a role of Protagonist and in which roles and communicative characteristics are coded by different devices (see Schachter 1977). A syntactically ergative language is Dyirbal (see Dixon 1972). The asymmetry of accusative and ergative languages is not typologically accidental, but can be explained very naturally. The role of Protagonist (and not Factitive) in discourse most often has the communicative status of definite (according to the data of Givón 1979:52). The Agent of a two-place verb in narrative texts is definite and topical in 91% of its occurrences, but the Patient in only 56%. This fact is semantic support for allotting role and communicative functions to the same case form.

12. Now let us return to the main topic of our discussion — the semantically ergative languages. In such languages, and in fact in all role-oriented languages, syntactic processes apply irrespective of the semantic roles involved. Thus they consistently preserve the coding of roles, consistently opposing Factitive to Agent. In the second part of this paper I will argue that this type of syntactic organization actually exists, despite the Eurocentric doubts of many theoreticians. Indo-European

languages belong to the mixed type of language with subject and object as basic entities. But in fact these are the notions which prevent us from understanding the essence of ergativity.

3 Syntactic features of role-oriented ergative languages

In this part I use my field data from twenty Daghestanian languages (see Kibrik 1979-1981, partially translated into English in Kibrik 1985), each of which in at least some respects approaches the ideal of semantic ergativity. Examples are from Archi unless otherwise indicated.

3.1 Semantic roles and cases

Sentences with core case frames:

(1) a. bošor w-irx$_o$ni
man,FAC,NOM,I work,PAST,I
The man worked.

b. buwa d-irx$_o$ni
mother,FAC,NOM,II work,PAST,II
The mother worked.

(2) a. bošor-mu buwa daaɬ=e-r-ƫi
man,AG,ERG,I mother,FAC,NOM,II beat,PAST,II
(compound verb)
The man beat (physically) the mother.

b. buwa-mu bošor daaɬ=e-w-ƫi
mother,AG,ERG man,FAC,NOM,I beat,PAST,I
The mother beat the man.

(3) a. bošor-mu-s buwa d-aƛu
man,EXP,DAT,I mother,FAC,NOM,II see,PAST,II
The man saw (my) mother.

b. bošor-mu buwa-s ɣ̱ₒalli bo-Lo
man,AG,ERG,I mother,REC,DAT bread,FAC,NOM,III give,PAST,III
The man gave the bread to (my) mother.

(4) a. bošor-mu buwa-s da-Ø-xdi
man,AG,ERG mother,REC,DAT hit,PAST,IV
The man hit (my) mother.

b. bošor-mu buwa-s xik' da-b-xdi
man,AG,ERG mother,REC,DAT fist,FAC,NOM,III hit,PAST,III
The man hit (my) mother with his fist.

(5) a. bošor ɣ̱ₒara=e-w-ƛi
man,FAC,NOM,I glad,PAST,I
The man was glad.

In (1) are sentences with the one-place verb 'work'. The Factitive NP is in the nominative, and the verb agrees with it in class (*w* for class I, *d* for class II). In (2) the Agent is in the ergative, the Factitive is in the nominative, and the verb again agrees with the Factitive in class (infixed d —> r in 2a). (3a) shows the case frame <Experiencer, Factitive> with the verb 'see'. It is important that the Experiencer is not identical to the Agent and has its own case marker, the dative. And in this example also the verb agrees with the Factitive. (3b) shows the three-place verb 'give'. The Agent and the Patient have ordinary case markers, ergative and nominative respectively; the Factitive controls verb agreement; and the third actant, the Recipient, has the same case marker as the Experiencer, namely dative. Here we have another hyperrole, Addressee, which combines the primary roles Recipient and Experiencer.

In (4a) what is of interest is the absence of a Factitive NP in the nominative, and the affected object of the verb 'hit' is interpreted as a Recipient-Addressee. No controller of agreement is present and the verb takes the

form of the neutral class IV (marker Ø). (4b) shows what is responsible for the unusual case array in (4a): the verb 'hit' governs its full case frame (which is the same as that of 'give') in which the Factitive-Patient (here, 'fist') is the manipulated object. This verb shows us that Archi is highly sensitive to the semantic roles of participants.

(5) shows that the Experiencer of a one-place verb is coded by the nominative, which means that with a one-place verb an actant with any elementary role (and not only Agent or Patient) is consistently identified with the hyperrole Factitive.

To summarize: in a simple independent clause the case marking of NPs depends entirely on their role features. The central role of Factitive is iconically emphasized twice: by the presence of the unmarked direct case (nominative) and by agreement. This is shown in Figure 2.

Figure 2. The core structure of a simple independent clause

The word order in Daghestanian languages is not fixed; Figure 2 shows neutral word order.

3.2 Voices

Voices (similar to English passive) are absent in Daghestanian languages, and this characteristic can be considered a direct consequence of ergativity (see Introduction): voice-changing derivations would destroy the principle of role-oriented case coding.

3.3 Semantic role derivation

The absence of voices does not mean that case-changing processes are impossible. However, all instances of case change prove to reflect not syntactic transformations but rather changes in the semantic roles of actants.

(6) a. doš-mi-s ẋ$_o$alli bo-q'i
sister,REC,DAT bread,FAC,NOM,III give,IMP,III
Give the bread to sister.

b. doš-mi-rak ẋ$_o$alli bo-q'i
sister,MEANS,LOC bread,FAC,NOM,III give,IMP,III
Give the bread to sister for somebody else.

The difference between (6a) and (6b), which is manifested superficially by a switch from dative to locative case, is conditioned by the semantic role of the actant 'sister'. In (6a) the sister has the role of Addressee-Recipient while in (6b) she is the intermediate point of the process of giving, i.e., has the role Means, which is coded by the locative case.

LAK

(7) a. gwana-l c$_o$uku iik'undi
he,AG,ERG thief,FAC,NOM kill,PAST
He killed the thief (intentionally).

b. gwana-ša c$_o$uku iik'undi
he,SOURCE,LOC thief,FAC,NOM kill,PAST
He killed the thief (unintentionally).

In (7a) 'he' is Agent and responsible for the death of the thief, while in (7b) 'he' is the Source of the action. This is the reason for the change of case marking from ergative to locative.

BEZHTA

(8) a. is-t'i ɬi RarLol-ca
brother,ERG water,NOM boil,PRES
The brother boils the water.

b. is (ɬi-d) RarLol-daa-c
brother,NOM water,INST boil,PRES,ANTI-PASS
The brother is capable of boiling/is competent to boil (water).

In (8b) the antipassive derivation of structure (8a) is presented. It is not functionally symmetrical to the passive of syntactically accusative languages; in this respect the Daghestanian antipassive is essentially different from the antipassive of Dyirbal, which organizes topic chains (see Dixon 1972). In (8b) there is a valence reduction: the verb

has become a one-place one. Consequently the actant 'brother' is interpreted as Factitive and marked by the nominative case. The patient argument 'water' is no longer a core actant of the verb (it is not a NP of one of the types represented in Figure 2) but an Oblique. It is optional and usually absent in such sentences, and when present it necessarily has generic meaning.

3.4 Semantic derivation of predicates

In Daghestanian languages there is a class of labile verbs which have both two-place <Agent, Factitive> and one-place <Factitive> case frames:

(9) a. buwa-mu waIrt'i a-b-q'u
mother,ERG cup,NOM,III break,PAST,III
The mother broke the cup.

b. waIrt'i a-b-q'u
cup,NOM,III break,PAST,III
The cup broke.

The important difference between (9a) and (9b) is that (9b) lacks an agentive NP in the ergative. The core component is the same in both instances:

NP + _____ -V
FAC=NOM

There also exists a causative which adds an Agent to a verb lacking one as in (10a-b), (11a-b).

(10) a. buwa d-irx̣ni
mother,NOM,II work,PAST,II
The mother worked.

b. bošor-mu buwa d-irx-m-us a-r-u
man,ERG mother,NOM,II work,INF,II do,PAST,II
The man caused the mother to work.

(11) a. buwa-mu-s mul a-b-ku
mother,DAT mountain,NOM,III see,PAST,III
The mother saw the mountain.

b. bošor-mu buwa-mu-s mul a-b-k-us a-b-u
man,ERG mother,DAT mountain,NOM,III see,INF,III do,PAST,III
The man caused the mother to see the mountain, or
The man showed the mountain to the mother.

It is interesting that the causative derivation applied to the experiential verb 'see' (11a) generates the verb 'show' (11b), where the roles of Addressee and Factitive have the same case marking as they would with the source verb 'see'.

In Archi, as in many other Daghestanian languages, causativization of agentive verbs is impossible, since then the derived structure would have two NPs with the role of Agent. In the few Daghestanian languages which allow such causatives, the Agent of the primary sentence receives the locative marker in the derived sentence:

CHAMALAL

(12) a. oši woha un
he,ERG tree,NOM push
He pushed the tree.

b. de oš-uč' woha un-al
I,ERG he,LOC tree,NOM push,CAUS
I caused him to push the tree.

This is far from being a pure syntactic shift of the case of the Agent. The semantics of causation in this case presupposes the presence of a second noun argument with the Oblique role: "X did something (P) toward Y". This Y receives the locative marker while a coreferential Agent in the embedded clause is deleted (coreferential NP-deletion is entirely typical for Daghestanian languages, as noted below).

3.5 Nominalization

Examples with nominalized sentences (corresponding to (1)-(2) above):

(13) a. bošor w-irx$_{o}$-mul
man,NOM,I work,I,NMLZR
man's work

b. bošor-mu buwa daaɬ=du-k-mul
man,ERG mother,NOM,II beat,II,NMLZR
the man's beating of mother

It is easy to see that the internal structure of these sentences, including the cases of NPs, remains constant. Nominalization is marked by addition of the suffix *-mul* to the verb as head of the sentence. This verb becomes a noun and can receive the case form required by the matrix sentence.

3.6 Reflexivization

It is interesting that several Daghestanian languages preserve the syntactic type described above as neutral, even in the presence of reflexivization:

DARGWA

(14) a. it-e čej iχI-ib
he,ERG REFL,NOM save,PAST
He saved himself.

b. it či-ne iχI-ib
he,NOM REFL,ERG save,PAST
He saved himself.

In (14a) the first NP, the Agent, controls reflexivization, and the second one, the Factitive, is the target of reflexivization. In (14b) the semantic roles (and hence the cases) of the controller and target are reversed, but the word order is the same: controller + target. Reflexivization is determined by the word order of NPs rather than their semantic or syntactic function.

3.7 Relativization

In (15a) the primary base structure with the three-place verb 'give' is exemplified, while (15b-d) show derived constructions with different targets of relativization.

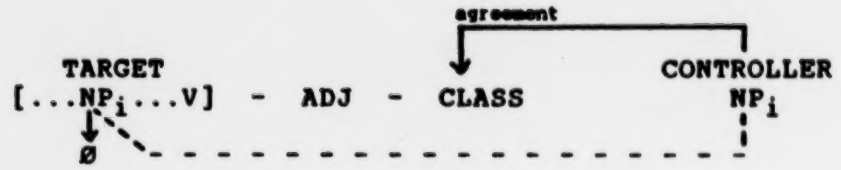
(15) a. tuxt'ul-li bošor-mu-s č'or Ø-Lo
doctor,ERG man,DAT pill,NOM,IV give,PAST,IV
The doctor gave the pill to the man.

b. Ø bošor-mu-s č'or Ø-Lo-ƫu-w tuxt'ur
ERG man,DAT pill,NOM,IV give,PAST,IV-ADJ,I doctor,I
the doctor who gave the pill to the man

c. tuxt'ul-li bošor-mu-s Ø Ø-Lo-ƫu-t č'or
doctor,ERG man,DAT NOM give,PAST,IV-ADJ,IV pill,IV
the pill that the doctor gave to the man

d. tuxt'ul-li Ø č'or Ø-Lo-ƫu-w bošor
doctor,ERG DAT pill,NOM,IV give,PAST,IV-ADJ,I man,I
the man to whom the doctor gave the pill

The target of relativization, whatever its role, undergoes deletion, but otherwise the structure of the source sentence remains without change. The verb as the head of the clause acquires the adjectival suffix -*ƫu*. Then the clause, as an adjective, receives external agreement with the head noun. In (15c) the head noun and the Factitive of the embedded relative clause are coreferential and the verb has two markers of class IV (prefix marking internal agreement, suffix marking external agreement). In (15b) and (15d) the controllers of internal and external agreement are different. Nevertheless, there are no restrictions on relativization. Schematically, relativization can be presented in the following manner:



3.8 Complementation

There is a widespread opinion that coreference relations in the context of verbs like 'want' are universally restricted and follow the accusative pattern (Dixon 1979). This statement is in contradiction with the following data:

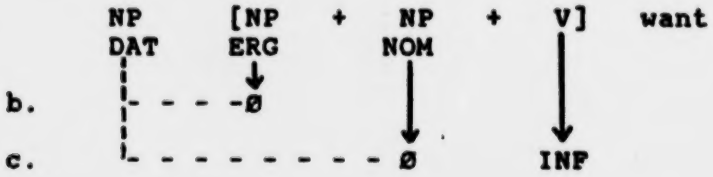
CHAMALAL

(16) a. wac-ud jac č'in
brother,ERG sister,NOM beat,PAST
The brother beat the sister.

b. wac-ɬa $_S$[Ø jac čiina]$_S$ idalaq ikʼo
brother,DAT ERG sister,NOM beat,INF want NEG
The brother does not want to beat the sister.

c. jac-ɬa $_S$[wac-ud Ø čiina]$_S$ idalaq ikʼo
sister,DAT brother,ERG NOM beat,INF want NEG
The sister does not want to be beaten by the brother.

(16a) represents the initial structure of the sentence, which is embedded in (16b-c) as a complement of the verb 'want'. In (16b) the coreferential Agent undergoes deletion and the verb receives the infinitive marker; in (16c) the Factitive is deleted. There are no restrictions on coreference of nominal actants (for details see Kibrik 1987). Schematically, complementation is organized as follows:



3.9 Coordination

Coordinated constructions have no restrictions on what can undergo conjunction reduction, as can be demonstrated with the following data:

CHAMALAL

(17) a. $_S$[wac w-i'a]$_S$ $_S$[Ø jac č'in]$_S$

brother,NOM come,PAST,I ERG sister,NOM beat,PAST
The brother came and beat the sister.

b. $_S$[jac n-i'a]$_S$ $_S$[wac-ud Ø č'in]$_S$

sister,NOM come,PAST,II brother,ERG NOM beat,PAST
The sister came and was beaten by the brother.

In the second conjunct it is possible to delete either a coreferential Agent (17a) or a coreferential Patient (17b) without ambiguity. The NP of the first conjunct controls conjunction reduction.

How is it possible to avoid ambiguity when the first conjunct has a two-place verb? One of the possibilities is as follows:

(18) a. wac $_S$[Ø jac-la č'iin]$_S$ w-exa w-una

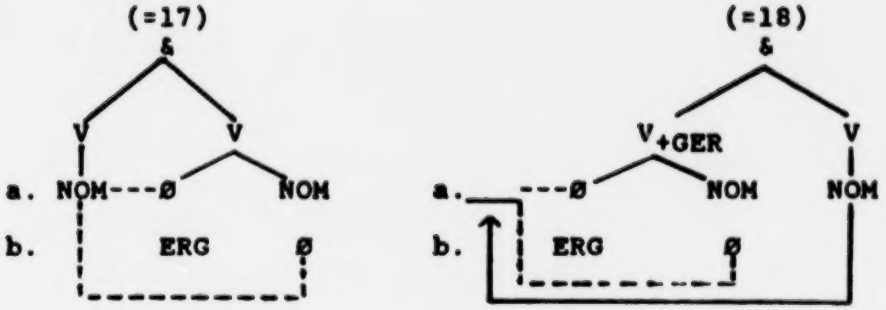
brother,NOM ERG sister,NOM,EMPH beat,GER go,II be,PAST,II
The brother beat the sister and left.

b. jac $_S$[wac-ud-la Ø č'iin]$_S$ j-exa j-ina

sister,NOM,II brother,ERG,EMPH NOM beat,GER go,II be,PAST,II
The sister was beaten by the brother and left.

In this case, the NP of the second conjunct becomes left-dislocated by the embedding of the first conjunct into the second. This is clearly seen from the case marking of the first nominal, and also by the agreement of the second verb with this nominal. The technique of conjunction reduction remains the same (with the exception of emphasizer *-la*, which usually is added to the full NP), without involving ambiguity.

Schematically, conjunction reduction can be represented in the following manner:



OR:

(=17) [NP + V] & [NP + NP + V]
NOM ERG NOM

a. -Ø

b. Ø

(=18) [NP + NP + V_i] & [NP + V_j]
ERG NOM NOM

[NP + [NP + NP + V_i] + V_j]
NOM ERG NOM

a. -Ø

b. -Ø

4 Summary

The data of semantically ergative languages shows that a pattern of syntactic organization is possible in which all syntactic processes apply irrespective of the roles of the NPs. Such a pattern allows the language to consistently follow the principle of role determination of case marking.

Of course the real situation is much more complex and varied. There are many instances of apparent deviation from syntactic neutrality, but closer analysis of these deviations usually shows that there is semantic motivation of the surface linguistic form (see Kibrik 1987).

One of my main goals in this paper has been to demonstrate the existence of languages whose core structure is determined by the principle of consistent differentiation of semantic roles by means of case coding; that is, to demonstrate the existence of role-oriented languages. If we refrain from interpreting role-oriented languages in terms of subject and direct object, then their organization becomes extremely natural, simple, and motivated. At the same time we gain the hope that by starting with languages of pure types we can reach a deeper and more adequate understanding of the structure of mixed languages.

ABBREVIATIONS

A,AG	agent
ACC	accusative
ADJ	adjectivizer
ANTI-PASS	antipassive
CAUS	causative
DAT	dative
EMPH	emphasizer
ERG	ergative
EXP	experiencer
FAC	factitive
I,...IV	noun class I,...IV
IMP	imperative
INF	infinitive
INST	instrumental
LOC	locative
N	nominative
NEG	negative
NMLZR	nominalizer
P	patient
PRES	present
REC	recipient
REFL	reflexive

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